Acne Pathway (January 2015)

Key Points:
- Encourage patient self-care and check for aggravating factors.
- Mild and moderate acne with low risk of scarring, prescribe a single topical treatment (either topical retinoid or benzoyl peroxide. Combined treatment is rarely necessary). For mild acne, benzoyl peroxide based treatments are available over the counter (OTC) from local community pharmacies.
- Prescribe azelaic acid if other agents are poorly tolerated.
- Moderate acne with risk of scarring; consider combined treatment with oral antibiotic and topical retinoid or benzoyl peroxide.
  - Do not prescribe an oral or topical antibiotic alone. Do not combine a topical and an oral antibiotic.
  - Oral antibiotics: limit to the shortest possible period (max. 6 months). Limit topical antibiotics to 12 weeks where possible, to reduce the risk of bacterial resistance developing.
  - Minocycline is not recommended.
- Oral isotretinoin should NOT be prescribed in primary care. Patients with severe acne requiring oral isotretinoin should be referred to a Consultant Dermatologist. Monitor all patients on oral isotretinoin for severe psychiatric disorders as per MHRA guidance.
- For women patients, consider starting hormonal contraception: standard monophasic combined oral contraceptive (COC) with at least 30µg ethinylestradiol. For moderate and severe acne consider prescribing co-cyprindiol. Discontinue three to four menstrual cycles after the woman's acne has resolved.

Mild Acne

Step 1 Single Topical
- Papules/ pustules present
  - Benzoyl Peroxide (BP)
  - Pure comedonal
  - Topical Retinoid (Topical isotretinoin)

Step 2
- Pure comedonal
  - Adapalene
  - Azelaic acid.
- Papules/ pustules present
  - Azelaic acid

Moderate Acne

Step 1: Combined topical treatment
- Topical retinoid plus Topical antibiotic
  - Isotretinoin/adapalene plus clindamycin/ erythromycin

Step 2: Oral antibiotic + topical retinoid or BP
- 1st line
  - Doxycycline 50-100mg OD
- 2nd line:
  - Lymecycline 408mg OD
  - Pregnancy and Breastfeeding: do not use tetracycline antibiotic including doxycycline and lymecycline.
  - Consider erythromycin 500mg BD (if tetracyclines not tolerated/contraindicated)

Severe Acne

Follow up: 6-12 weeks depending on initial severity. Review effectiveness, tolerability and compliance. If inadequate response- check adherence. If no response after 2–3 months, seek specialist advice particularly regarding changing antibiotics.

Other patients who may require referral include those who have severe psychosocial problems, including a morbid fear of deformity (body dysmorphic disorder). Patients who are developing scarring, or are at risk of developing it, despite primary care interventions, those with moderate acne that has failed to respond adequately to treatment over a period of at least 6 months, and patients with features that make the diagnosis uncertain.

Refer routinely to endocrinology or gynaecology, those women suspected of having an underlying endocrinological cause of acne such as polycystic ovary syndrome. Consider BP or topical retinoid (isotretinoin or adapalene), azelaic acid or alternatively consider an oral antibiotic only in combination with a topical drug (avoid topical antibiotics) whilst waiting for appointment.
### Topical Retinoids

<table>
<thead>
<tr>
<th>Drug</th>
<th>Brand</th>
<th>Indication</th>
<th>Dose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Isotretinoin 0.05%</td>
<td>Isotrex® Gel</td>
<td>Mild to moderate acne</td>
<td>Apply thinly OD or BD</td>
</tr>
<tr>
<td>Adapalene 0.1%</td>
<td>Differin® Gel or Cream</td>
<td>Mild to moderate acne</td>
<td>Apply OD in the evening</td>
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</tbody>
</table>

### Benzoyl Peroxide and Azelaic Acid

<table>
<thead>
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<th>Brand</th>
<th>Indication</th>
<th>Dose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benzoyl peroxide</td>
<td>Generic or Panoxyl® (if available), other brands include Acnecide®, Brevoxyl®.</td>
<td>Mild to moderate acne</td>
<td>Apply OD or BD</td>
</tr>
<tr>
<td>Azelaic acid 20%</td>
<td>Skinoren® Cream</td>
<td>Mild to moderate acne</td>
<td>Apply BD</td>
</tr>
<tr>
<td>Azelaic acid 15%</td>
<td>Finacea® Gel</td>
<td>Mild to moderate acne</td>
<td>Apply BD</td>
</tr>
</tbody>
</table>

### Topical Antibiotics

<table>
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<th>Indication</th>
<th>Dose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clindamycin 1%</td>
<td>Dalacin T® Solution or Lotion</td>
<td>Moderate acne</td>
<td>Apply thinly BD</td>
</tr>
<tr>
<td>Erythromycin 2%</td>
<td>Stiemycin® Solution</td>
<td>Moderate acne</td>
<td>Apply thinly BD</td>
</tr>
<tr>
<td>Azelaic acid 15%</td>
<td>Finacea® Gel</td>
<td>Moderate acne</td>
<td>Apply BD</td>
</tr>
</tbody>
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### Dual Therapy Options

- Only consider combination products if poor compliance with single constituent products

<table>
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<tr>
<th>Drug</th>
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<th>Dose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benzoyl peroxide 3% + clindamycin 1%</td>
<td>Duac® Once Daily Gel</td>
<td>Moderate acne</td>
</tr>
<tr>
<td>Isotretinoin 0.05% + erythromycin 2%</td>
<td>Isotrexin®</td>
<td>Moderate acne</td>
</tr>
<tr>
<td>Erythromycin 2%</td>
<td>Zineryt® Topical Solution</td>
<td>Moderate acne</td>
</tr>
</tbody>
</table>

#### Key

- BP = Benzoyl Peroxide
- OD = Once daily
- BD = Twice daily

#### Colour coded costs for topical agents

- £0 - £4.99
- £5.00-9.99
- £10.00-14.99
- £15.00+

### Adherence Adequate? Consider:

- Increasing drug strength and/or frequency
- Combine topical products: i.e. topical antibiotic with BP or topical retinoid
- N.B. Topical retinoid with BP may be poorly tolerated. Apply separately at different times of day to minimise risk of adverse skin reactions.

### Adherence Poor? Consider:

- Reducing strength of treatment (i.e. from 5% to 2.5% BP).
- Switch to a less irritant alternative: topical antibiotic or azelaic acid. Adapalene may be better tolerated than topical isotretinoin or tretinoin.
- Consider different formulation (i.e. cream instead of alcoholic base gel or solution).

### Oral Antibiotics

- Duration of treatment is at least 3 months. The daily dose may be reduced after 2–4 months, if adverse effects emerge.
- Doxycycline is recommended 1st line, lymecycline 2nd line. Erythromycin can be used if tetracyclines are not tolerated/contraindicated.
- A treatment with a smaller dose over six months may result in a better long term result than shorter treatments.

### Pregnancy

- Topical retinoids and tetracyclines, including oral formulations are contraindicated in pregnancy; females of child-bearing age must use effective contraception (oral progestogen-only contraceptives are not considered effective).
- Always consider contraceptive needs of females of child bearing age and discuss the pregnancy risks of oral retinoids before referral.